REMARKS

The Examiner is thanked for the due consideration given the application.

Claims 48, 49, and 52-58 are pending in the application. Claims 50 and 51 are been canceled by this amendment. Claims 53-58 are newly presented.

Regarding the amendments to independent claim 48, Figures 2A and 2B of the specification support that the condensing surface of the condenser (43) and recovery member (corresponding to gutter 43c) is disposed to face a surface of the coating layer. New claim 53 generally sets forth subject matter canceled from claim 48. New claim 54 finds support in the specification at page 16, lines 5-22 and in Figure 3. Regarding new claim 55, Figures 2A and 2B support that the surfaces of the condensing member 43a, 43b and the recovery member 43c for facing a surface of the coating layer are parallel to the moving direction.

And further, Figures 1 and 2 show that the web is transported along upper direction reverse to a gravitational direction. The specification at page 16, lines 5-22 and Figure 2 show that the gutter 43c corresponding to claimed recovery member is disposed at lower side of condenser 43. This disclosure means that the gutter 43c is disposed at upstream side along the moving direction from a condensing surface where protrusions 43a and grooves 43b formed.

New claim 56 finds support in the specification at page 16, line 26 to page 17, line 18. New claims 57 and 58 find support in Figure 4.

No new matter is believed to be added to the application by this amendment.

Rejection Under 35 USC §112, Second Paragraph

Claims 48-52 have been rejected under 35 USC §112, second paragraph, as being indefinite. This rejection is respectfully traversed.

The Office Action asserts that the term "drying" in the preamble does not match any of the claim limitations. However, the preamble of claim 48 has been amended to not recite "drying."

The Office Action asserts that limitations utilizing the word "disposed" or "to confront" are unclear. However, the claims have been amended so as not to utilize this type of phraseology. Also claims 50 and 51 have been canceled, thus mooting any issues regarding these claims.

The claims are thus clear, definite and have full antecedent basis.

This rejection is believed to be overcome, and withdrawal thereof is respectfully requested.

Rejections Under 35 USC §112, First Paragraph

Claims 48-52 have been rejected under 35 USC §112, first paragraph, as not complying with the written description requirement.

Claims 48-52 have been rejected under 35 USC §112, first paragraph, as not complying with the enablement requirement.

Claim 50 has been rejected under 35 USC §112, first paragraph, as not complying with the enablement requirement by setting forth subject matter which was not sufficiently described in the specification.

These rejections are respectfully traversed.

The Office Action asserts that the applicants' disclosure does not set forth a solvent recovery system. The Office Action also asserts that the applicants' disclosure does not provide enablement for *"the claims of all mechanisms used to recover condensed vapor from the class of all possible types of condensing mechanisms, employed in almost unlimited situations."*

However, the instant claims are now drawn to a method for condensing and recovering a solvent from a coating layer, which is within the scope of the original disclosure.

The cancellation of claim 50 moots any issues pertaining to this claim.

The instant claims are thus supported by the specification and sufficiently enabled such that one of skill can practice the present invention without recourse to undue experimentation.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

Art Rejections

Claims 48, 49, 51 and 52 have been rejected under 35 USC §102(b) as being anticipated by SURPRENANT (U.S. Patent 3,595,205). Claim 50 has been rejected under 35 USC §103(a) as being unpatentable over SURPRENANT in view of FIGIEL (U.S. Patent 4,753,735).

These rejections are respectfully traversed.

The present invention pertains to a method for condensing and recovering a solvent from a coating layer which is formed by applying a coating solution containing solvent to a moving web, which is exemplarily illustrated in Figures 2A and 3 of the application, which are reproduced below.

FIG.2A

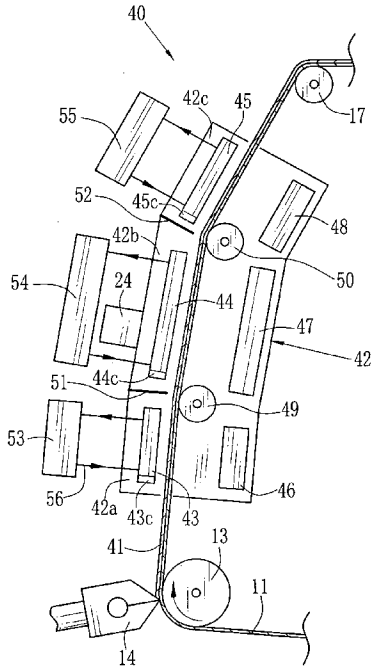
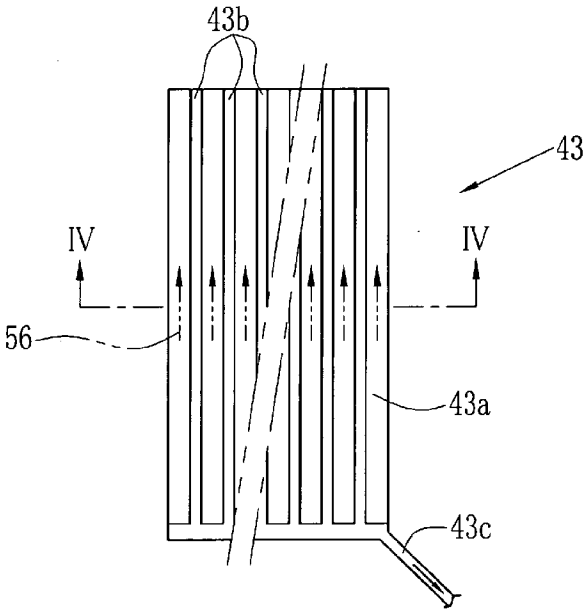


FIG.3



Independent claim 48 of the present invention sets forth:

> *condensing vapor of said solvent by a device for condensing and recovering said solvent arranged to face a surface of said coating layer having been formed on said web, and said device being composed of a condensing member and a recovery member; and*
>
> *recovering the condensed vapor of said solvent by said device.*

SURPRENANT pertains to a coating apparatus. Figures 1 and 2 of SURPRENANT are reproduced below.

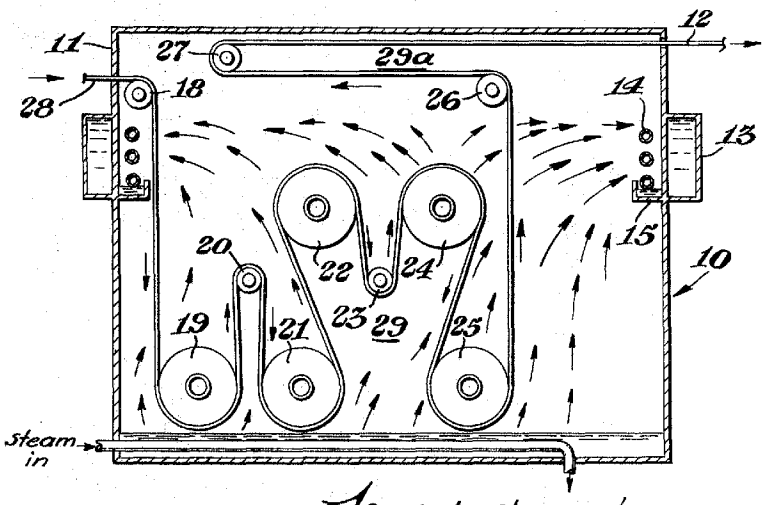


Fig. 1

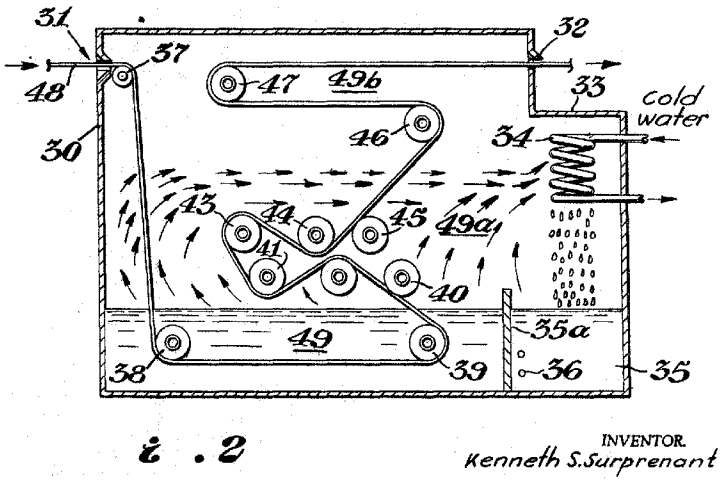


Fig. 2

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Kenneth S. Surprenant

In regards to independent claim 48 of the present invention, SURPRENANT may resemble the present invention in view of condensing solvent evaporated from the web to recover the condensed solvent vapor. But, SURPRENANT is different from the present invention in view of the fact that ***a surface of the condensing member and the recovery member face a surface of the coating layer***.

In SURPRENANT, the cooling coil 34 may face the web transported between heated rollers 45, 46. But the sump 35

doesn't face the surface of the web. It is not necessary for the sump 35 to face the surface of the web, since the sump 35 merely receives and heats droplet of the condensed solvent vapor (Figure 2 and col. 4, lines 20-27).

In contrast, the present invention has the coating layer facing the condenser 43 to correspond to the claimed device for condensing and recovering the solvent, and gutter 43c (specification page 15, lines 20-31, new claims 57-58). On a condensing surface of the condenser 43 are formed protrusions 43a and grooves 43b (Figures 3 and 4, reproduced below). Therefore, in the present invention, ***a surface of the condensing member and recovery member face a surface of the coating layer.*** SURPRENANT does not disclose this feature.

FIG.3

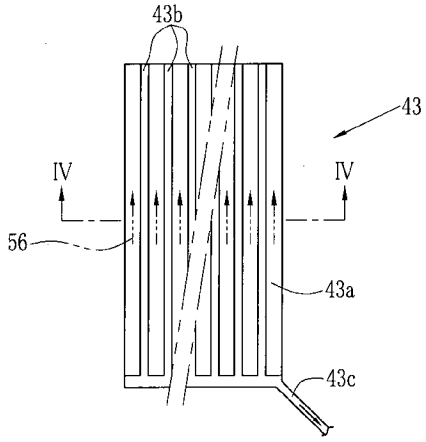
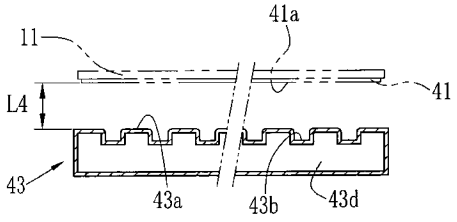


FIG.4



Regarding new claim 54, SURPRENANT is different from the present invention in view of the fact that ***the condensing member and the recovery member are integrated with each other***.

Contrast the present invention, where protrusions 43a and grooves 43b portions and gutter 43c are integrated to form the condenser 43 (Figures 2 and 3). ***The constitution of condensing surface and gutter 43c enables cooled solvent to flow into gutter 43c***, and the solvent is recovered.

On the contrary, the cooling coil 34 and sump 35 of SURPRENANT are separated spatially. Therefore, the cooling coil 34 and sump 35 cannot be integrated each other.

Regarding new claim 55, if the surfaces of the condensing member and the recovery member for facing the surface of the coating layer are parallel to the moving direction, the condensing member and the recovery member are integrated with each other, and the recovery member is disposed at lower side from the condensing member along a direction which is reverse to a gravitational direction (Figures 2A and 2B), the recovery member easily recovers the solvent condensed on the surface of the condensing member via the surface of the recovery member, since the unnecessary forces against the gravity does not generate (specification at page 16, lines 10-14).

Regarding new claim 56, the present invention keeps a distance between the surface of the condensing member and the surface of the coating layer is in a predetermined range to

prevent the natural convection of the coating solution from forming the drying non-uniformity, for example (specification at page 16, line 26- page 17, line 18).

Contrasting Figure 2 and col. 4, lines 9-27, SURPRENANT has the aim that the cooling coil 34 condenses solvent vapor to solvent liquid to be dropped into sump 35 (col. 4, lines 44-55). Therefore, SURPRENANT does not consider the distance between the cooling coil 34 and the surface of the web.

FIGIEL does not address the deficiencies of SURPRENANT discussed above.

SURPRENANT thus does not anticipate a claimed embodiment of the present invention. One of ordinary skill and creativity would not produce a claimed embodiment of the present invention from a knowledge of SURPRENANT and FIGIEL, and a *prima facie* case of unpatentability has thus not been made.

These rejections are believed to be overcome, and withdrawal thereof is respectfully requested.

Conclusion

It is believed that the rejections have been overcome, obviated or rendered moot, and no issues remain. The Examiner is accordingly respectfully requested to place the application in condition for allowance and to issue a Notice of Allowability.

The Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 25-0120 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17.

Respectfully submitted,

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